ELSEVIER

Environmental and Experimental Botany 47 (2002) 291–292

Environmental and Experimental Botany

www.elsevier.com/locate/envexpbot

Contents of volume 47

VOLUME 47, ISSUE 1 **JANUARY 2002**

Interactive effects of sodium chloride and calcium chloride on the accumulation of proline and glycinebetaine in peanut (*Arachis hypogaea* L.)
C. Girija (Nellore, India), B. N. Smith and P. M. Swamy (Provo, UT, USA) 1

Structural and functional traits of *Quercus ilex* in response to water availability
F. Bussotti, D. Bettini, P. Grossoni, S. Mansuino, R. Nibbi, C. Soda and C. Tani (Firenze, Italy) 11

How substantial are ultraviolet-B supplementation inaccuracies in experimental square-wave delivery systems?
C. F. Musil (Cape Town, South Africa), L. O. Björn (Lund, Sweden), M. W. J. Scourfield (Durban, South Africa) and G. E. Bodeker (Central Otago, New Zealand) 25

Effects of salt stress on growth, inorganic ions and proline accumulation in relation to osmotic adjustment in five sugar beet cultivars
C. Ghoulam, A. Foursy and K. Fares (Marrakech, Morocco) 39

Effects of gradual versus step increases in carbon dioxide on *Plantago* photosynthesis and growth in a microcosm study
D. Hui (Norman, OK, USA), D. A. Sims (Los Angeles, CA, USA), D. W. Johnson (Reno, NV, USA), W. Cheng (Santa Cruz, CA, USA) and Y. Luo (Norman, OK, USA) 51

Effects of desiccation on peanut (*Arachis hypogaea* L.) seed protein composition
H. Mazhar and S. M. Basha (Tallahassee, FL, USA) 67

Ecophysiology of a wild platyopuntia exposed to prolonged drought
E. Pimienta-Barrios, M. E. González del Castillo-Aranda (Zapopan, Mexico) and P. S. Nobel (Los Angeles, CA, USA) 77

Guide for authors 87

VOLUME 47, ISSUE 2 **MARCH 2002**

Nodule distribution on the roots of actinorhizal *Discaria trinervis* (Rhamnaceae) growing in pots
C. Valverde and L. G. Wall (Bernal, Argentina) 95

Effects of changes in soil temperature on seedling emergence and phenological development in field-grown stands of peanut (*Arachis hypogaea*)
M. A. Awal and T. Ikeda (Niigata, Japan) 101

Changes of chloroplast ultrastructure and total chlorophyll concentration in cabbage leaves caused by excess of organic Ni(II) complexes
J. Molas (Zamosc, Poland) 115

Effects of manganese on the viability of vegetative diaspores of the epiphytic lichen *Hypogymnia physodes*
M. Hauck, A. Paul, C. Mulack, E. Fritz and M. Runge (Göttingen, Germany) 127

Differences in growth rate, nitrogen fixation and numbers of cyanobionts and heterocysts among three *Azolla pinnata* var. *pinnata* strains
K. Maejima, E. Uheda, S. Kitoh and N. Shiomi (Osaka, Japan) 143

Allelopathic effects of parthenin against two weedy species, *Avena fatua* and *Bidens pilosa*
D. R. Batish, H. P. Singh, R. K. Kohli (Chandigarh, India), D. B. Saxena (New Delhi, India) and S. Kaur (Chandigarh, India) 149

Growth response of *Equisetum fluviatile* to elevated CO_2 and temperature
A. Ojala, P. Kankaala and T. Tulonen (Lammi, Finland) 157

Effect of external potassium supply and plant age on the uptake of radiocaesium (^{137}Cs) by broad bean (*Vicia faba*): interpretation of results from a large-scale hydroponic study
Y.-G. Zhu, G. Shaw (Berkshire, UK), A. F. Nisbet and B. T. Wilkins (Oxon, UK) 173

Book review 189

Acknowledgements 191

VOLUME 47, ISSUE 3 **MAY 2002**

Metabolic changes in rice seedlings with different submergence tolerance after desubmergence
N. Kawano (Tottori, Japan), E. Ella (Makati City, Philippines), O. Ito (Ibaraki, Japan), Y. Yamauchi and K. Tanaka (Tottori, Japan) 195

Intraspecific variability of phenolic concentrations and their responses to elevated CO_2 in two mediterranean perennial grasses
E. Castells (Bellaterra, Spain), C. Roumet (Montpellier, France), J. Peñuelas (Bellaterra, Spain) and J. Roy (Montpellier, France) 205

Stomatal response to nonhydraulic root-to-shoot communication of partial soil drying in relation to foliar dehydration tolerance
R. M. Augé and J. L. Moore (Knoxville, TN, USA) 217

Stresses on joints of *Opuntia laevis*: forces necessary for mechanical failure and role of lignified xylem cells as resistance components
Z. Kahn-Jetter, L. S. Evans and S. Butwell (Bronx, NY, USA) 231

Photochemical responses and oxidative stress in two clones of *Coffea canephora* under water deficit conditions
A. L. S. Lima, F. M. DaMatta, H. A. Pinheiro, M. R. Totola and M. E. Loureiro (Viçosa, Brazil) 239

Effects of nitrogen forms on dry matter partitioning and nitrogen metabolism in two contrasting genotypes of *Catasetum fimbriatum* (Orchidaceae)
N. Majerowicz (Seropedica, Brazil) and G. B. Kerbauy (Sao Paulo, Brazil) 249

Modification of the thylakoid structure of *Euglena gracilis* by norflurazon-treatment: consequences for fluorescence quenching
H. Tschiersch, E. Ohmann and M. Doege (Halle/S., Germany) 259

Accumulation properties of As, Cd, Cu, Pb and Zn by four wetland plant species growing on submerged mine tailings
E. Stoltz and M. Greger (Stockholm, Sweden) 271

Comparative protective strategies of *Cistus albidus* and *Quercus ilex* facing photoinhibitory winter conditions
G. Oliveira (Barcelona, Spain; Lisbon, Portugal) and J. Peñuelas (Barcelona, Spain) 281

Contents of volume 47 291

(Contents continued from outside back cover)

Modification of the thylakoid structure of *Euglena gracilis* by norflurazon-treatment: consequences for fluorescence quenching
H. Tschiersch, E. Ohmann and M. Doege (Halle/S., Germany) 259

Accumulation properties of As, Cd, Cu, Pb and Zn by four wetland plant species growing on submerged mine tailings
E. Stoltz and M. Greger (Stockholm, Sweden) 271

Comparative protective strategies of *Cistus albidus* and *Quercus ilex* facing photoinhibitory winter conditions
G. Oliveira (Barcelona, Spain; Lisbon, Portugal) and J. Peñuelas (Barcelona, Spain) 281

Contents of volume 47 291